

17. A computer system for providing information to an individual to allow him to reduce the physical and mental dysfunction caused by a particular trip across a plurality of time zones, the system comprising:

- means for receiving itinerary data including a trip departure time, a trip departure location, a trip arrival time, and a trip destination location;
- means for accessing a database of time zone information to obtain the time zones of the trip departure location and the trip destination location in response to the itinerary data;
- means for calculating the phase change between the departure and destination locations using the accessed time zone information;
- means coupled to the data receiving means and to the phase change calculating means for determining a time shift day in response to the received itinerary data and the calculated phase change;
- means for determining a reference point on the time shift day;
- means for using the reference point to generate recommendations of daily activity, said recommendations responsive to the itinerary data and the calculated phase change in accordance with chronobiological rules, the recommendations including a schedule for the days surrounding the time shift day indicating sleep times, meals times, meal types, caffeine times, and a watch reset time; and
- output means for providing the recommendations to the individual.

18. The method of claim 17 wherein the reference point determined is a time for a break-the-fast-breakfast meal.

19. A method of operating a general purpose computer to provide information to an individual to help the individual to reduce dysfunction caused by a particular trip across a plurality of time zones, the method comprising the steps of:

- receiving itinerary data, the itinerary data including a trip departure time, a trip departure location, a trip destination location and a trip arrival time;
- receiving input of key event data, the key event data including the location, date, time, and duration of key events;
- accessing a database of time zone information to determine the time zones of a plurality of locations, including the trip departure location and the trip destination location;
- calculating a phase change between the departure and destination locations in response to the accessed time zone information;
- determining a time shift day in response to the trip departure time, the trip arrival time, the phase change and the key event data;
- determining a time for a break-the-fast-breakfast meal on the time shift day;
- using the time for the break-the-fast-breakfast meal as a reference point to generate a schedule of daily recommendations of activity for the days surrounding the time shift day in accordance with chronobiological rules; and

providing the recommendations to the individual.

20. The method of claim 19 wherein the step of using the time for the break-the-fast-breakfast meal as reference point to generate a schedule of daily recommendations activity includes generating a daily schedule indicating fast/feat days, meal times, meal types, caffeine times, and a watch reset time.

21. The method of claim 19 further comprising the steps of:

- recommending changing the time for the break-the-fast-breakfast meal so that an event does not fall into a deep-rest-phase range of the destination or effective time zone; and

recommending no break-the-fast-breakfast meal for short trips and trips where key events can take place during a normal-efficient-active phase range of the individual.

22. The method of claim 19 further comprising the step of receiving individual preferences data and wherein said step of using the times for the break-the-fast-breakfast meal time to generate a schedule is responsive to the individual preferences data.

23. The method of claim 19 further comprising the steps of grouping legs of a trip in response to the time zones of destinations and recommending dates for phase shifts in response to times and locations of the key events, lengths of stay at each destination, and magnitudes of phase shifts between groups.

24. The method of claim 19 wherein said step of using the time for the break-the-fast-breakfast meal to generate a schedule of daily recommendations of activity comprises the steps of:

- determining a time for a first sleep prior to the time for the break-the-fast breakfast meal;
- determining a reset watch time in response to the time for the first sleep prior to the time for the break-the-fast-breakfast meal;
- determining a time for a first sleep after the time for the break-the-fast-breakfast meal;
- determining a time for a last breakfast on departure time prior to the time for the break-the-fast-breakfast meal; and
- determining a time for a last sleep on departure time prior to the time for a last breakfast on departure time.

25. The method of claim 24 wherein said step of using the time for the break-the-fast-breakfast meal to generate a schedule of daily recommendations of activity further comprises the steps of:

- determining meal times for the days surrounding the time shift day;
- determining times for ingesting caffeine on the days surrounding the time shift day; and
- determining when meals should be skipped on the days surrounding the time shift day.

26. The method of claim 19 wherein said step of providing the recommendations to the individual comprises the step of adjusting lights, serving meals, and serving caffeinated drinks to a passenger on a flight in accordance with the recommendations.

* * * * *